

Attachment  
June 13, 2005 Amendment

Serial No. 10/791,006

5. (Previously Presented) The method of claim 4, wherein using the high-density plasma remote plasma nitrogen hardening treatment comprises using a process run in a range of approximately 1 second to approximately 30 seconds at a temperature of between about 30° C and about 90° C using about 800 watts to 3000 watts of power.

6. (Currently Amended) The method of claim 1, wherein forming the oxide layer over the at least a portion of the substrate comprises forming an oxide layer having a thickness of about ~~30~~ 30 to about ~~50~~ 50.

7. (Previously Presented) The method of claim 1, wherein patterning the resist to create the at least one exposed area of the oxide layer comprises patterning the resist to create a plurality of exposed areas of the oxide layer.

8. (Previously Presented) A method for fabricating an integrated circuit device including N-channel and P-channel devices having selectively hardened gate oxides on a substrate, the method comprising:  
forming an oxide layer over at least a portion of the substrate;  
forming a first resist over at least a portion of the oxide layer;  
patterning the first resist to create at least one exposed area of the oxide layer and at least one covered area of the oxide layer;  
conducting a first remote plasma nitrogen treatment to create at least one partially hardened area within the oxide layer and at least one nonhardened area within the oxide layer;  
stripping the first resist;  
growing at least a portion of the at least one nonhardened area within the oxide layer using a thermal oxidation process to form at least one thick area within the oxide layer;  
forming a second resist over at least a portion of the at least one thick area within the oxide layer;  
patterning the second resist to create at least one exposed area of the at least one thick area; and  
conducting a second remote plasma nitrogen treatment to create at least one second hardened

area and at least one second nonhardened area within the at least one thick area of the oxide layer.

9. (Previously Presented) The method of claim 8, wherein the substrate comprises a silicon substrate and forming the oxide layer over the at least a portion of the substrate comprises thermally growing the oxide layer from the silicon substrate.

10. (Previously Presented) The method of claim 8, wherein conducting the first remote plasma nitrogen treatment to create the at least one hardened area within the oxide layer and the at least one nonhardened area within the oxide layer comprises conducting a high-density plasma remote plasma nitrogen treatment.

11. (Previously Presented) The method of claim 10, wherein conducting the high-density plasma remote plasma nitrogen treatment comprises conducting a process run for approximately 1 second to approximately 10 seconds at between about 30° C and about 90° C using about 800 watts to 3000 watts of power.

12. (Currently Amended) The method of claim 10, wherein forming the oxide layer over the substrate comprises forming an oxide layer having a thickness of about ~~30~~—30 to about ~~50~~—50 and growing at least a portion of the at least one nonhardened area within the oxide layer using the thermal oxidation process to form the at least one thick area within the oxide layer comprises growing at least a portion of the at least one nonhardened area to a thickness of about ~~50~~—50 to about ~~70~~—70.

13. (Previously Presented) The method of claim 8, further comprising processing the substrate and the oxide layer to produce an integrated circuit device including at least one P-channel device including a hardened gate oxide and at least one N-channel device including a nonhardened gate oxide.